

## Claims:

1. A method for performing aggregate-portion-specific flow shaping in packet-switched telecommunications, in which method

- digital information is transferred as constant or variable-length packets,

- the packets arrive in the system as at least two separate traffic flows (V1-VL, traffic flow),

- at least one shaping group (k), each of which includes at least one traffic flow (V1 - VL) arriving in the system is defined in the system, and

- restrictions (e.g., CIR, PIR, CBS) are set for at least one shaping group (k), which includes at least two traffic flows (V1-VL) arriving in the system,

**characterized** in that

- the earliest permitted moment, at which a packet in the system can be forwarded from the system, is defined as the greatest value of the VTS values of all the shaping groups (k), to which shaping groups (k) the traffic flow (V1-VL) represented by the packet belongs, and

- as a result of the forwarding of the packet, the VTS values of the same shaping groups (k) are updated, in which the VTS value of an individual shaping group (k) expresses the earliest permitted moment, at which a packet belonging under the relevant shaping group (k) can be forwarded, without breaking the restrictions of the speed properties of the shaping group (k) being examined.

2. A method according to Claim 1, **characterized** in that the traffic flows (V1-VL) contained in at least one shaping group (k) are all also included in some second shaping group (hierarchical shaping).

3. Equipment for performing aggregate-portion-specific flow shaping in packet-switched telecommunications, in which the equipment includes

- means for receiving constant or variable-length packets carrying digital information,

5 - means for classifying a packet arriving in the system as representing one of the traffic flows (V1-VL, traffic flow) arriving in the system,

- means for defining at least one shaping group (k) in the system, in such a way that each shaping group (k) includes at least one traffic flow (V1-VL) arriving in the system, and

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- means for setting restrictions (e.g., CIR; PIR, CBS) for the speed properties for each least one such shaping group (k), which includes at least two traffic flows (V1-VL) arriving in the system, and

15 - means for forwarding packets to an outgoing link or links,

**characterized** in that the equipment includes

20 - means, with the aid of which it is possible to define the earliest permitted moment, at which a packet in the system can be forwarded, as the largest value of all the VTS values of the shaping groups (k), to which shaping groups (k) the traffic flow represented by the packet belongs, and with the aid of which means it is possible to update the VTS values of the same shaping groups (k) as a consequence of forwarding the packet, in which the VTS value of an individual shaping group (k) expresses the earliest permitted moment,  
25 at which a packet under the shaping group (k) in question can be forwarded, without breaking the restrictions of the speed properties of the shaping group being examined.

4. Equipment according to Claim 3, **characterized** in that the equipment includes means, with the aid of which it is possible to define all the traffic flows (V1-VL)  
30 contained in at least one shaping group (k) as belonging to some second shaping group (hierarchical shaping).